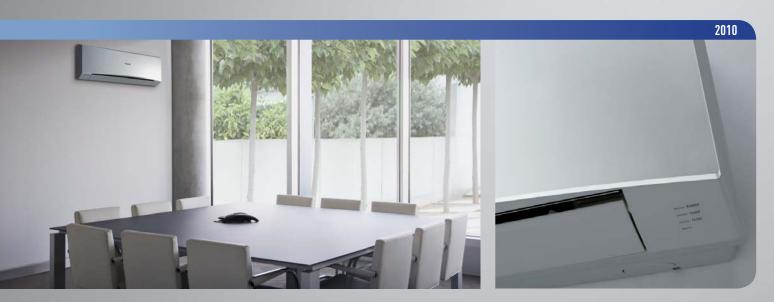
# Panasonic ideas for life



FS MULTI VRF // HEATING AND COOLING SYSTEMS



## HIGH EFFICIENCY MATTERS

**JATTERS** 

heating and cooling systems

## WITH UNIQUE ETHEREA WALL MOUNTED (WHITE AND SILVER), DESIGNER INDOOR UNITS ARRIVE TO PROFESSIONAL APPLICATIONS!



### ETHEREA

designed to care for you









#### **New FS Multi from Panasonic an outstanding VRF solution!**

The FS Multi is the new range of VRF which capitalises on Panasonic's experience in air conditioning buildings and large surface areas with its Urban Multi series and VRF-R410A technology. Ideal for commercial areas as well as for use in the home, the FS Multi always meets the requirements of the most demanding customers.

#### THE ADVANTAGES OF PANASONIC'S FS MULTI

- · Up to 6 different indoor unit types.
- Up to 30 indoor units in total, from 2.2 kW to 9 kW.
- Possibility to connect a unique wall type Etherea design, white and silver.
- 3 outdoor unit ratings: 4.5 and 6 H.P., single-phase.
- Panasonic Inverter technology with R410A gas, for greater comfort and economy with lower consumption.

- Ease of installation. Thanks to the reduced dimensions of the outdoor unit it can be taken to the roof of the building in a lift.
- Easy control in a centralised or individual form, or even by computer control with a range
  of functions for achieving optimum climate management in your business.
- Allows you to choose the best option depending on architectural needs and decoration criteria.

#### **OUTDOOR UNITS**

A new outdoor unit design which is more adapted to today's building and architectural requirements.

- Up to 8 indoor units can be connected
- Capacities from 11.2 to 15.5 kW
- A 30 m difference in elevation

Mini-VRF Outdoor unit		4 H.P.	5 H.P.	6 H.P.
		U-4LA1E5	U-5LA1E5	U-6LA1E5
Cooling Capacity	kW	11.2	14	15.5
Heating Capacity	kW	12.5	16	18
Maximum Connection Ratio	%	130	130	130
Indoor unit selection allowance		5.6 kW to 14.5 kW within max 6 indoor	7.0 kW to 18.2 kW within max 8 indoor	7.7 kW to 20.1 kW within max 8 indoor
Power consumption Cooling / Heating	kW	3.10 / 3.04	4.31 / 3.97	5.15 / 4.69
EER Cooling	-	3.61 A	3.25 A	3.01 <b>B</b>
COP Heating	-	4.11 A	4.03 A	3.84 <b>A</b>
Operating current Cooling / Heating	Α	14.20 / 13.90	19.80 / 18.10	23.50 / 21.40
Starting current	Α	14	20	24
Max current	Α	22.5	26	29
Maximum power input Cooling / Heating	kW	4.4 / 4.7	5.7 / 5.7	6.2 / 6.2
Power source	V/Hz	230 / 50	230 / 50	230 / 50
Recommended fuse size	Α	30	30	30
Sound pressure level Cooling / Heating	dB(A)	52 / 54	53 / 55	55 / 57
Sound power	dB	74	72	71
Dimension H x W x D	mm	1340 x 900 x 350	1340 x 900 x 350	1340 x 900 x 350
Net weight	kg	115	123	123
Air flow rate	m³/min	92	95	98
Outdoor temperature Cooling / Heating	oC .	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24	-5 to +43 / -15 to +24
Pipe length (min max.)	m	20-90	20-90	20-90
Height difference ID - OD	m	30	30	30
Pipe diameter Liquid / Gas	mm (inch)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)	9.52 (3/8) / 15.88 (5/8)

#### **EXAMPLE OF CORRECT COMBINATION:**

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW)

Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-36YA1E5 (3.6 kW) Total capacity of indoor units selected: 8.6 kW.

#### **EXAMPLE OF INCORRECT COMBINATION:**

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 1.45 kW ) Indoors: S-22KA1E5  $\{2.2$  kW) + S-28KA1E5  $\{2.8$  kW) Total capacity of indoor units selected: 5.0 kW. The total indoor capacity is lower than the minimum permitted.

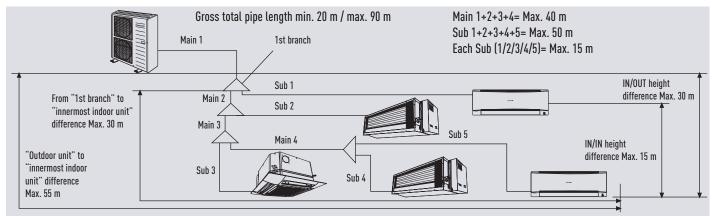
#### EXAMPLE OF INCORRECT COMBINATION:

Outdoor unit: U-4LA1E5 (minimum combination capacity: 5.6 kW, maximum combination capacity: 14.5 kW )

Indoors: S-22KA1E5 (2.2 kW) + S-28KA1E5 (2.8 kW) + S-90UA1E5 (9.0 kW) +S-56NA1E5 (5.6 kW)

Total capacity of indoor units selected:  $19.6\ kW$ . The total indoor capacity is higher than the maximum permitted.

#### REFRIGERANT PIPE LENGTH



#### WALL TYPE White, KA1 series, Etherea design

Elegant and exclusive design, inspired by Etherea's domestic best seller. Capacity: 2.2, 2.8, 3.6, 4.5, 5.6, 6.3, 7.1 kW



		0.8 H.P 2.2 kW	1.0 H.P 2.8 kW	1.5 H.P 3.6 kW	1.75 H.P 4.5 kW	2.0 H.P 5.6 kW	2.5 H.P 6.3 kW	3.0 H.P 7.1 kW
Mini-VRF Wall KA1 series		S-22KA1E5	S-28KA1E5	S-36KA1E5	S-45KA1E5	S-56KA1E5	S-63KA1E5	S-71KA1E5
Cooling Capacity	kW	2.2	2.8	3.6	4.5	5.6	6.3	7.1
Heating Capacity	kW	2.5	3.2	4.2	5.1	6.4	7.1	8
Power consumption Cooling / Heating	kW	0.025 / 0.025	0.027 / 0.027	0.03 / 0.03	0.035 / 0.035	0.045 / 0.045	0.05 / 0.05	0.055 / 0.055
Dimension (H x W x D) / Net weight	mm / kg	290 x 870 x 204 / 9	290 x 1070 x 235 / 11	290 x 1070 x 235 / 12	290 x 1070 x 235 / 12			
Sound pressure level Low / High	dB(A)*	33 / 38	33 / 39	34 / 42	35 / 43	38 / 44	39 / 46	40 / 48
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)

Remote controls not included, see next page for references.

#### WALL TYPE Silver, KA1 series, Etherea design

Elegant and exclusive design, inspired by Etherea's domestic best seller. Capacity: 2.2, 2.8, 3.6, 4.5 kW



		0.8 H.P 2.2 kW	1.0 H.P 2.8 kW	1.5 H.P 3.6 kW	1.75 H.P 4.5 kW
Mini-VRF Wall KA1 series		S-22KA1E5S	S-28KA1E5S	S-36KA1E5S	S-45KA1E5S
Cooling Capacity	kW	2.2	2.8	3.6	4.5
Heating Capacity	kW	2.5	3.2	4.2	5.1
Power consumption Cooling / Heating	kW	0.025 / 0.025	0.027 / 0.027	0.03 / 0.03	0.035 / 0.035
Dimension (H x W x D) / Net weight	mm / kg	290 x 870 x 204 / 9			
Sound pressure level Low / High	dB(A)*	33 / 38	33 / 39	34 / 42	35 / 43
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)

Remote controls not included, see next page for references.

#### CASSETTE 60X60, YA1 series

Stylish and compact, it can be installed in ceilings and standard architectural modules. Capacity: 2.2, 2.8, 3.6, 4.5, 5.6 kW



		0.8 H.P 2.2 kW	1.0 H.P 2.8 kW	1.5 H.P 3.6 kW	1.75 H.P 4.5 kW	2.0 H.P 5.6 kW
Mini-VRF Mini-Casette YA1 series		S-22YA1E5	S-28YA1E5	S-36YA1E5	S-45YA1E5	S-56YA1E5
Panel (not included)		CZ-KPY1	CZ-KPY1	CZ-KPY1	CZ-KPY1	CZ-KPY1
Cooling Capacity	kW	2.2	2.8	3.6	4.5	5.6
Heating Capacity	kW	2.5	3.2	4.2	5.1	6.4
Power consumption Cooling / Heating	kW	0.035 / 0.035	0.035 / 0.035	0.040 / 0.040	0.040 / 0.040	0.045 / 0.045
Dimension (H x W x D) / Net weight	mm / kg	260 x 575 x 575 / 18				
Sound pressure level Low / High	dB(A)*	33 / 36	33 / 37	34 / 38	35 / 39	36 / 40
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)

750 mm drain-up mechanism included. Remote controls not included, see next page for references.

#### CASSETTE 90X90, UA1 series

Elegant design and high airflow rate for a comfortable and appealing environment. Capacity: 6.3, 7.1, 9.0 kW



Mini-VRF Casette comparison UA1 series		2.5 H.P 6.3 kW S-63UA1E5	3.0 H.P 7.1 kW S-71UA1E5	3.5 H.P 9.0 kW S-90UA1E5
Panel (not included)		CZ-BT03P	CZ-BT03P	CZ-BT03P
Cooling Capacity	kW	6.3	7.1	9.0
Heating Capacity	kW	7.1	8	10
Power consumption Cooling / Heating	kW	0.11 / 0.11	0.115 / 0.115	0.115 / 0.115
Dimension (H x W x D) / Net weight	mm / kg	246 x 840 x840 / 26	246 x 840 x840 / 26	246 x 840 x840 / 26
Sound pressure level Low / High	dB(A)*	35 / 41	36 / 42	36 / 42
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)	9.52 (3/8) 15.88 (5/8)

750 mm drain-up mechanism included. Remote controls not included, see next page for references.

#### HIDE AWAY 0-3 mmAq, NA1 series

Compact design. Guarantees good air distribution. 0-3 mmAq. Capacity: 2.2, 2.8, 3.2, 3.6, 4.5, 5.6 kW



Mini-VRF Duct NA1 series (D4)		0.8 H.P 2.2 kW S-22NA1E5	1.0 H.P 2.8 kW S-28NA1E5	1.25 H.P 3.2 kW S-32NA1E5	1.5 H.P 3.6 kW S-36NA1E5	1.75 H.P 4.5 kW S-45NA1E5	2.0 H.P 5.6 kW S-56NA1E5	
Cooling Capacity	kW	2.2	2.8	3.2	3.6	4.5	5.6	
Heating Capacity	kW	2.5	3.2	3.6	4.2	5.1	6.4	
Power consumption Cooling / Heating	kW	0.075 / 0.075	0.08 / 0.08	0.085 / 0.085	0.085 / 0.085	0.095 / 0.095	0.105 / 0.105	
Dimension (H x W x D) / Net weight	mm / kg	200 x 900 x 550 / 21	200 x 900 x 550 / 21	200 x 900 x 550 / 22	200 x 900 x 550 / 22	200 x 900 x 550 / 22	200 x 900 x 550 / 22	
Air flow rate	m³/min	6-8-10	7-9-11	7-9-11	7-9-11	8-10-12	8.5-10.5-12.5	
External static pressure	Pa/mmAq		0 or 29 / 0 or 3 mmAq (factory defalut 0 mmAq)					
Sound pressure level Low / High	dB(A)*	30 / 36	30 / 37	31 / 38	31 / 38	32 / 39	32 / 39	
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	

Remote controls not included, see next page for references. Filter for S-\_NA1E5 not available.

#### HIDE AWAY 5-7 mmAq, MA1 series

Unit designed to offer maximum flexibility in terms of installation methods. 5-7 mmAq. Capacity: 4.5, 5.6, 6.3, 7.1, 9.0 kW



Mini-VRF Duct MA1 series (D3)		1.75 H.P 4.5 kW S-45MA1E5	2.0 H.P 5.6 kW S-56MA1E5	2.5 H.P 6.3 kW S-63MA1E5	3.0 H.P 7.1 kW S-71MA1E5	3.5 H.P 9.0 kW S-90MA1E5
Cooling Capacity	kW	4.5	5.6	6.3	7.1	9.0
Heating Capacity	kW	5.1	6.4	7.1	8.0	10
Power consumption Cooling / Heating	kW	0.135 / 0.135	0.135 / 0.135	0.135 / 0.135	0.135 / 0.135	0.175 / 0.175
Dimension (H x W x D) / Net weight	mm / kg	250 x 780+100 x 650 / 28	250 x 780+100 x 650 / 29	250 x 1000+100 x 650 / 32	250 x 1000+100 x 650 / 32	250 x 1000+100 x 650 / 32
Air flow rate	m³/min	11-13-15	11-13-15	13-15-17	13-15-17	15-17-19
External static pressure	Pa/mmAq	49 or 69 / 5-7 (factory default 5 mmAq)				
Sound pressure level Low / High	dB(A)*	35 / 42	35 / 42	36 / 43	36 / 43	37 / 44
Pipe diameter Liquid / Gas	mm (inch)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	6.35 (1/4) / 12.70 (1/2)	9.52 (3/8) 15.88 (5/8)	9.52 (3/8) 15.88 (5/8)

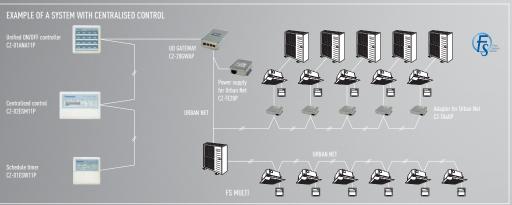
Remote controls not included, see next page for references. S-\_MA1E5 with dust filter.

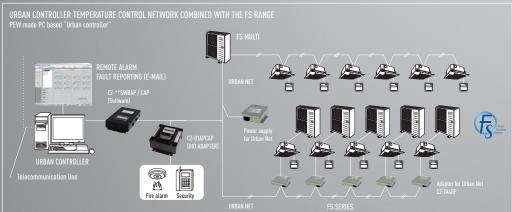
\* Indoor noise level measured at 230 V.

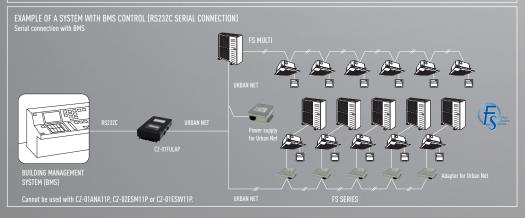
#### **INDOOR UNITS**

	2.2 kW	2.8 kW	3.2 kW	3.6 kW	4.5 kW	5.6 kW	6.3 kW	9.0 kW
Wall type White SKA1E5		-		-	-			
Wall type Silver SKA1E5S		-		-	-			
Cassette 60x60 SYA1E5								
Cassette 90x90 SUA1E5								
Hide away 0-3 mmAq SNA1E5								
Hide away 5-7 mmAq SMA1E5								

### **CONNECTIVITY.** Easy connection with Urban Controller Software











Infrared remote control (for all Heat Pump)
CZ-RWS1
Infrared remote control (for all Cooling Only)
CZ-RWC1

CZ-RD1





Adapter for external signals CZ-TA31P